

CLAIMS

I claim:

1. An injection molded article, said article comprising an mLLDPE copolymer resin of ethylene and hexene, said resin further characterized by an MI of about 22 to about 28 dg/min, a density of about 0.915 to about 0.919 g/cc, an MFR<20 dg/min, an Mw/Mn<3, an Mz/Mw<2, and <3% C₆ extractables.
2. The injection molded article according to Claim 1, said copolymer resin comprising from about 8 to about 13 wt.% 1-hexene.
3. The injection molded article according to Claim 1, said copolymer resin further characterized by an MI of about 24 to about 26 dg/min.
4. The injection molded article according to Claim 1, said copolymer resin further characterized by a density of about 0.917 to about 0.919 g/cc.
5. The injection molded article according to Claim 1, said copolymer resin further characterized by an MFR of from about 16 to about 17 dg/min.
6. The injection molded article according to Claim 1, said copolymer resin further characterized by a molecular weight distribution Mw/Mn in the range of about 2.5 to about 3.0.
7. The injection molded article according to Claim 1, said copolymer resin further characterized by an Mz/Mw in the range of about 1.7 to about 1.8.
8. The injection molded article according to Claim 1, wherein said article further characterized by having a Tensile Impact @ -40C of at least about 340 ft.-lb./in².

9. The injection molded article according to Claim 1, said copolymer resin further comprising about 1 to about 20 wt.% of a high pressure, low density polyethylene.

10. The injection molded article according to Claim 1, said copolymer resin consisting essentially of about 99 to about 80 wt.% of said mLLDPE copolymer of ethylene and hexene and about 1 to about 20 wt.% of a high pressure, low density polyethylene.

11. An injection molded article comprising a container and a lid for said container, wherein said container comprises a resin selected from HDPE, polypropylene, and mixtures thereof, and said lid comprises an mLLDPE copolymer resin of ethylene and hexene, said resin further characterized by an MI of about 22 to about 28 dg/min, a density of about 0.915 to about 0.919 g/cc, an MFR<20 dg/min, an Mw/Mn<3, an Mz/Mw<2, and <3% C₆ extractables.

12. The injection molded article according to Claim 11, said copolymer resin of said lid comprising from about 8 to about 13 wt.% 1-hexene.

13. The injection molded article according to Claim 11, said copolymer resin of said lid further characterized by an MI of about 24 to about 26 dg/min.

14. The injection molded article according to Claim 11, said copolymer resin of said lid further characterized by a density of about 0.917 to about 0.919 g/cc.

15. The injection molded article according to Claim 11, said copolymer resin of said lid further characterized by an MFR of from about 16 to about 17 dg/min.

16. The injection molded article according to Claim 11, said copolymer resin of said lid further characterized by a molecular weight distribution Mw/Mn in the range of about 2.5 to about 3.0.

17. The injection molded article according to Claim 11, said copolymer resin of said lid further characterized by an Mz/Mw in the range of about 1.7 to about 1.8.

18. The injection molded article according to Claim 11, wherein said lid is further characterized by having a Tensile Impact @ -40C of at least about 340 ft.-lb./in².

19. The injection molded article according to Claim 11, said copolymer resin of said lid further comprising about 1 to about 20 wt.% of a high pressure, low density polyethylene.

20. The injection molded article according to Claim 11, said copolymer resin of said lid consisting essentially of about 99 to about 80 wt.% of said mLLDPE copolymer of ethylene and hexene and about 1 to about 20 wt.% of a high pressure, low density polyethylene.

21. In a method of storing food subjected to repeated freeze/thaw cycles, the improvement comprising storing food in an article according to Claim 1, said article comprising a container and a lid.

22. In a method of storing food subjected to repeated freeze/thaw cycles, the improvement comprising storing food in an article according to Claim 11, said article comprising a container and a lid.